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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,350	06/20/2001	Jeffrey E. Stall	MSFT116683	4165

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EXAMINER

ARNOLD, ADAM

ART UNIT	PAPER NUMBER
2671	3

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,350

Applicant(s)

STALL, JEFFREY E.

Examiner

Adam Arnold

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-16 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2 and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bantz, U.S. Patent No. 4,731,606, in view of Cornett, U.S. Patent No. 5,491,494. Referring to claim 1, Bantz discloses a method for rendering a window tree having a plurality of nodes (col. 2, lines 20-24), comprising defining a recursive procedure (see Figure 3, showing recursive looping), identifying one of the nodes to be rendered (col. 2, lines 42-43), determining whether a visual object defined at said identified node is visible (col. 2, line 44, i.e. the node is within "extents"), copying rendering information for a sub-tree of the window tree defined by the identified node onto a stack (col. 3, lines 62-65 and col. 4, lines 28-34), and calculating the bounds of an invalidation rectangle in coordinates relative to the object and determining whether the object should be rendered (col. 2, lines 43-49). Bantz does not disclose determining whether an object is trivial for purposes of rendering it. Cornett discloses a trivial test to determine whether a line primitive is visible within a pick window (col. 5, line 64). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have a test for determining whether an object is trivial for purposes of rendering it. One of ordinary skill in the art would have been motivated to do this because of the excessive number of objects

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on the screen (see Cornett, line 26), which would require a test for determining which of these should be picked.

Referring to claim 2, Bantz discloses using data from the stack associated with a parent node of the object (col. 3, lines 63-67) as an invalidation rectangle (col. 2, lines 38-45). Bantz does not disclose determining whether a transformation is applied to the object. Cornett discloses transforming the center of the rectangular pick window to origin coordinates (col. 5, lines 66-67). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to make a transformation determination. One of ordinary skill in the art would have been motivated to do this in order to simplify graphics display processing (see Cornett, col. 5, line 26).

Referring to claim 4, Brantz discloses examining a bit associated with an object (col. 2, lines 28-30).

Referring to claim 5, the remarks presented above with regard to claims 1 above, apply equally to this claim.

Referring to claim 6, Brantz discloses defining a recursive procedure (see Figure 3, showing recursive looping) comprising, determining whether a node intersects an invalidation rectangle (col. 2, line 42), rendering a visual object at the node (col. 2, line 43) and recalling a recursive procedure for each children of the node (col. 2, line 42).

Referring to claim 7, Brantz discloses where the rendering determination is based on determining the intersection of said object and bounds of the invalidation rectangle in coordinates relative to the object (col. 2, lines 35-49).

Referring to claim 8, Gayraud discloses a computer-controlled apparatus (col. 3, line 14, i.e. computer screen) for performing the method of claims 1-7 above.

Referring to claim 9, Gayraud discloses a computer-readable medium comprising instructions (col. 3, line 29, the instructions are the program, while the medium is inherent, in that the instructions have to be stored somewhere on the computer) for performing the method of claims 1-7 above.

3. Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gayraud, U.S. Patent No. 6,005,570. Referring to claim 10, Gayraud discloses a method for hit-testing a window tree (col. 8, line 25) comprising a plurality of nodes (col. 8, lines 4-9, where a parent and child window consists of plural nodes), receiving a request to hit-test a window tree comprising a point in coordinates relative to a container (col. 8, lines 24-30), setting a current node of the window tree to a root node of the tree (col. 8, line 4), determining whether a point is within a visual object defined at the current node (col. 8, lines 31-36, whether the cursor is within a "child window"), in response to determining that the point is within the visual object, applying a transformation associated with the visual object to the point (col. 8, line 41, i.e., resizing the window to which the point resides), and determining whether the node has a child node (col. 8, line 31). Gayraud does not disclose responding to the determination that the current node does not have a child node by indicating that the point is located in the current node. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to respond to the determination that the current node does not have a child node by indicating that the point is located in the current node. One of ordinary skill in the art would have been

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motivated to do this in order to provide a user interface that require little or no knowledge of the specific commands by the user (col. 3, lines 15-16).

Referring to claim 11, Gayraud further discloses in response to determining that the current node has a child node, determining whether the point is located within a visual object located at said child node (col. 8, lines 31-36), setting said node to the child node (col. 8, lines 24-31), applying a transformation associated with the visual object to the point (col. 8, line 41, i.e., resizing the window to which the point resides), and determining whether the current node has a child node (col. 8, line 31). Gayraud does not disclose responding to the determination that the current node does not have a child node by indicating that the point is located in the current node. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to respond to the determination that the current node does not have a child node by indicating that the point is located in the current node. One of ordinary skill in the art would have been motivated to do this in order to provide a user interface that require little or no knowledge of the specific commands by the user (col. 3, lines 15-16).

Referring to claim 12, Gayraud further discloses in response to determining that the current node has a child node, determining whether the point is located within a visual object located at said child node (col. 8, lines 31-36) and determining whether the current node has an additional child node (col. 8, line 31).

Referring to claim 13, the remarks presented above with regard to claim 12 above, apply equally to claim 13.

Referring to claim 14, the remarks presented above with regard to claim 10 above, apply equally to claim 13.

Referring to claim 15, Gayraud discloses a computer-controlled apparatus (col. 4, line 67) for performing the method of claims 10-14 above.

Referring to claim 16, Gayraud discloses a computer-readable medium comprising instructions (col. 5, lines 17-18) for performing the method of claims 10-14 above.

Allowable Subject Matter

4. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


The following is an examiner's statement of reasons for allowance: The prior art does not anticipate, nor does it suggest, the invention as claimed in claim 3. The prior art of record does not disclose in response to determining that a transformation should be applied to an object, creating a cumulative invalidation matrix utilizing an anti-transformation of the transformation and applying the cumulative invalidation matrix to the invalidation rectangle.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam Arnold whose telephone number is 703 305 8413. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached on 703 305 9798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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